MONTEREY ACCELERATED RESEARCH SYSTEM CABLED OBSERVATORY

DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT

PUBLIC MEETING

TRANSCRIPT OF PROCEEDINGS

SESSION 1

Taken on behalf of the Monterey Bay Aquarium Research Institute at 8272 Moss Landing Road, Moss Landing, California, before Melinda Nunley, CCR #9332, a Notary Public within and for the County of Monterey, State of California.

APPEARANCES:

Vicki Hill, Consultant for Monterey Bay Aquarium Research Institute

Michelle Brown, Project Manager for California Lands Commission

Keith Raybould, Monterey Bay Aquarium Research Institute

Jon Davidson, EIR/EIS Project Manager from Aspen Environmental Group

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Moss Landing, California, Thursday, April 7, 2005

4:10 p.m.

MS. HILL: Okay. You think we should start? Hopefully everybody has found a parking space by now and found the building. I'd like to welcome everyone here today to this meeting that's being held jointly by the California State Lands Commission and Monterey Bay National Marine Sanctuary. My name is Vicki Hill as you can see on the name tag, and I'm a consultant to the Sanctuary helping them with environmental issues associated with this project.

We are here today to present information on the Monterey Bay aquarium Research Institute's proposed MARS cable project. The main intent of the meeting today is to provide information on it but more importantly to get public comments.

Before we get started I want to take care of a few housekeeping items and that is I hope everyone has signed in on the sign-in sheet that's at the back table, and back there there are speaker slips if anyone would like to speak today, make comments on the environmental document. Also there are agendas back there. I hope everyone got a copy of it. Also we have copies of the Draft Environmental Impact Report/Environmental Impact Statement, the EIR/EIS

on the back table as well, right, if anyone wants to take a look at one during the meeting, and if you need to get a copy of one for yourself, please feel free to ask.

We have several agency and applicant and consultant representatives today. In fact I think we outnumber any members of the public here, and I'll introduce a few of these people. Unfortunately Dierdre Hall from the Sanctuary could not be here today. She's the project manager from the Sanctuary, but Holly Price is here from the Sanctuary sitting in for her. From the State Lands Commission we have Michelle Brown who is the project manager for the environmental review process for the state and Nancy Quesada who will be working -- raise your hand, Nancy -- who will be working on writing the lease for the project should the project be approved by the state. We also have -- from the applicant we have Keith Raybould who will be giving details about the project description and Mandy Allen who's worked on the project as well. I know that there's a lot of other people here from MBARI but I don't think I need to go through everyone right now. Finally we have our EIR/EIS contractor, Jon Davidson. He's the project manager for Aspen Environmental Group who prepared the EIR/EIS and he will go over the details, the findings of the EIR/EIS later in the agenda.

So with that, I'd like to just give a brief

background on the joint EIR/EIS process for those of you who might not be familiar with the process that has taken place for this project. The application was filed in February of 2004 and it was filed with both the State Lands Commission and the Sanctuary, and shortly after that both agencies got together and decided to do a joint environmental document. Under state law -- let me back up a second. Since the project crosses both state lands or state waters as well as federal waters, it's subject to both state and federal regulation. The state regulation is the California Environmental Quality Act known as CEQA and the Federal regulation National Environmental Policy Act, NEPA. Since these 2 laws are very similar, we decided to do one combined document rather than 2 separate documents for the state and the feds.

The environmental document was prepared, as I said, by Aspen Environmental Group under the direction of the State Lands Commission and the Sanctuary, and the consultant was selected jointly by the 2 agencies. And it serves as an informational document. There is an important point to make. It is not a decision document. It provides information. It's full disclosure, and it doesn't make recommendations on approval or denial of the project. Once the environmental process is completed then the agencies will make separate actions on the permit application and

they must consider information that's in the EIR/EIS in making those decisions.

Let's talk about scoping for just a second. I think Jon will probably cover some of the scoping issues as well, but prior to starting preparation of the EIR/EIS, we initiated a process called scoping that's required by both state and federal law. The 2 agencies issued notices via the Federal Register and mail, mailed out a number of notices to a wide variety of agencies, Sanctuary users, interest groups and other interested individuals. As a result of the scoping process, we received only 7 comment letters along with some verbal comments that were made during a scoping meeting last June in this very same location. Based on the scoping comments, on the professional experience of the agency staff as well as the environmental consultant, the work plan for the EIR/EIS was developed.

So now we have the draft document. This is the draft EIR/EIS and it was published on March 11th and it's now out for public review for 45 days. At the end of that 45-day public review period, we will go through all the comments and work with the consultant to prepare responses to each comment that was made on the document. After that we will prepare a final EIR/EIS in which all the comments and responses will be included. Once that final document

is published, and we think that's around the 1st of July, correct? We're hoping to get that out around the 1st of July. Then the State Lands Commission will take action on the project meaning they'll decide to either approve or deny a lease for the project and they will hold a public hearing associated with that. During the same time the Sanctuary will be preparing a Record of Decision for the project. This Record of Decision cannot be issued until 30 days after publication of the Final EIR/EIS. So that's the process. Probably project approval or action -- action on the project will take place by next summer, hopefully August.

Just a couple other notes, other activities that are happening right now, the document was sent out to a number of agencies for review and those agencies will probably use this document in making their decisions, such as the Coastal Commission and the Army Corps of Engineers. Also during this time I understand that the applicant and the fishermen's representatives are working together to develop a fishermen's agreement which will address issues such as fishing gear loss and liability. So that's taking place right now too.

I think that's all I have to say. With that I'd like to turn it over to Michelle Brown from the State Lands Commission who's going to spend a few minutes talking about

today's meeting and then we'll go on to the project description that Keith will present. Thanks.

MS. BROWN: Hi. My name's Michelle Brown. I'd like to thank you all for coming to this meeting. Again most of the things I have to say Vicki's pretty much covered but I have a little bit more.

MS. HILL: Sorry.

MS. BROWN: No, that's fine.

I'm a project manager for the California State Lands Commission. As we said, this is a joint document between the State Lands Commission and the Monterey Bay National Marine Sanctuary and the purpose of this meeting is for you to receive information about the project and for us to hear your comments about the adequacy of the document in addressing potential environmental impacts that may result from the project. The purpose of this meeting is not to discuss issues relating to the project or whether you are for or against the project.

The draft EIR/EIS was released on March 11th and comments must be received by the end of the 45-day review period which ends on April 26th. We'll be taking comments received today as well as those that are sent to us by fax or by email or by regular mail and all those will be responded to in the final document. The final document will then be considered for certification in the near

future, most likely August by our commission as well as by the Sanctuary.

Please make sure you've signed in on the sign-in sheet and if you would like to speak today, we have speaker slips. I'd like each person that would like to speak today to please write down your name, your agency affiliation or group affiliation so that our court reporter can properly record you for the record and that we can respond to your comments.

Now Keith Raybould will speak. He's going to give a description of the project, and after Keith is finished, then Jon Davidson will get into the details of the report. Thank you.

MR. RAYBOULD: Okay. So what I'm going to go through is a project description. I'm going to go through the MARS location and cable route, the purpose of the cable observatory, a description of the node and the trawl resistant frame, shore landing, cable installation and scheduling.

So the route starts at Moss Landing here and I'll describe the shore landing in a short while. It goes across the continental shelf to the north of the canyon through this neck of the Smooth Ridge down to the node that's here on Smooth Ridge. The depth of the node is almost 3,000 feet. There's about 30 miles of cable, and

the shore landing here that I'll describe in detail in a short while is through a horizontally directionally drilled 5-inch steel pipe.

The purpose -- the 2 main drivers and purposes for the MARS Cable Observatory was first as a test bed. It's a test bed for a larger regional cable observatory that's going to be built soon funded by the National Science Foundation as part of an Ocean Observer Initiative. This larger test bed -- this larger cable observatory is off the Oregon/Washington coast and it includes 30 or so nodes and about 3,000 kilometers of cable. MARS is a single node and 50 kilometers of cable as a test bed for testing the engineering that was necessary for building a cable observatory of this scale. After this regional cable observatory is built called NEPTUNE, MARS will be used for testing instruments and methods for deploying instruments prior to placing these instruments on this larger regional cable observatory. That's one of the aims, as a test bed.

The other one is to perform science, area science in the bay. There are many different science applications being proposed that the observatory can be used for. I can only just briefly mention 2 today in the time available. One of them will be for the seismometer studies. These are the faults that run through Monterey Bay. The San Gregorio Fault runs right across here. MARS will be able

to power a permanently installed seismometer on the west side of this fault. There are literally hundreds of seismometers on the east side. By being able to locate a seismometer on the west side that is able to get data continuously and is powered continuously, it will provide a lot of information on the mechanisms and locations of seismic activity along these critical fault lines.

One of the other areas I was going to mention is the application of using hydrophones on the cable observatory. This is an example of some data taken which shows whale calls here and this is a passing vessel. This is some seismic activity and it shows some of the data that can be taken with permanently installed cells such as MARS.

The cable will be buried to the maximum extent it can, nearly 70 to 75 percent of the route. There's a section just near Smooth Ridge where surface conditions don't allow it to be buried. It's designed for a 25-year lifetime after which it will be removed. During this 25 years new instruments will be designed and tested on the MARS facility prior to being moved and used on the regional cable observatory. These instruments will be located within a 4-kilometer radius of the MARS node and then connected and provided with powered communication by service laid cables. The facility provides about 10 kilowatts of power and gigabits band width which is of

course a magnitude more than can be provided by battery-powered self-contained instruments, and there's 8 instrument ports for connecting the instruments to it.

The node itself, that's shown here. This is approximately 10 feet by 8 feet, weighs about 2 tons. This is inserted inside a trawl resistant frame that you can see here. This is the actual trawl resistant frame that's being manufactured as we speak. This is the cable that comes back to Moss Landing. These are the cables that go out to the instruments that we'll connect to the ports on here. So we can maintain this facility by bringing back the node with our regular day vessel ships so there's no need to bring extra vessels in for doing maintenance on the system. All the electronics are contained in this node and this can be retrieved on a daily mission to the location.

The shore landing, this is the entrance for Moss Landing Harbor. The shore landing is just here. This is the property that's owned by MBARI. There'll be a small hut which is approximately the size of what you can see here, and from this location there will be a horizontally directionally drilled pipe which will go from that shore landing location about 4700 feet to the other side of the canyon. This is a profile of the HDD pipe. This is where it enters on the shore side. It's located approximately 15 feet below the seabed surface and it exits here where the

cable will be inserted about 4700 feet offshore.

Cable installation, the cable is a one-inch diameter cable. It's single armored, lightweight armor protected. Those are 2 different types of cable. This the armoring around here on the cable. It will be buried 70 percent of the route. It will take about 3 or 4 days to install the cable and the node will take another 2 or 3 days and then the postlay inspection and burial which will take 1 to 2 days so the entire operation is something no longer than 8 or 9 days.

This is the cable laying vessel that we'll use for installation. It's called the Alcatel. It's got directional positioning. There's no need for any anchors during the entire operation.

In terms of schedule, we're planning on starting the horizontal directional drilling in September of this year. This will be followed by the cable node installation which, as I mentioned, will take somewhere in the order of 8 or 9 days to be done during this period, October, November. We would like to do this to try and avoid the southerly gray whale migration which is starting in December. The shore landing installation and connection back to utilities will then follow and the cable node installation which will be done in December, the operations starting in early 2006. And that's all I have for the

description.

MS. HILL: Are there any questions specific to the project description? Everyone raise their hand at once. Okay. Keith, you're getting off easy. No questions.

Okay. Jon Davidson from Aspen will now give an overview of the EIR/EIS.

MS. DAVIDSON: One of the things I liked about working on the environmental review for this project was the look on people's faces I got when I told them I worked on MARS.

I'm going to just kind of briefly give you an overview of the findings of the EIR/EIS that we prepared. First of all, the EIR/EIS was focused on 9 issues that the lead agencies had identified in their initial review and through the scoping process that Vicki already mentioned. These are the 9 issues of a larger set of issues that were considered potential to result in significant impacts and so we focused the EIR analysis on these 9 issues. It turns out that not all 9 had significant impacts but we didn't know that until the analysis was completed. For the issues that are not analyzed in the EIR/EIS, the reason why is documented in the back of the document in section 5.7 in your book.

If you're familiar with how these analyses are done, it's a pretty standard approach that's taken. The

specifics vary by topic and the project itself, but if you look at Section 4 of the document, the Impact Analysis, just kind of the core of the EIR/EIS, you'll see that the sections are all structured in a similar way and that's what I'm stepping through here. And the first is to establish current conditions, baseline conditions for each topic that's analyzed, and so there's a description of a current condition and there's also a description of applicable regulations. After that, significance criteria are presented, and what significance criteria tend to do is to set a threshold to use to measure the significance of the impacts. So if we know that the threshold is triggered, then we're going to consider that impact significant.

The -- the impacts we evaluate against those criteria and there's a determination made on whether an impact is significant or not, and you'll see a classification system in the EIR/EIS which is significant unavoidable impacts. These are impacts that can't be mitigated to less than significant level. Those are what we call Class 1 impacts. There's Class 2 impacts which are potentially significant but we have high confidence that the mitigation measures recommended in the document will reduce them to less than significant level. Class 3 are impacts that are adverse but not significant in magnitude

or severity. There's also a Class 4 which we really didn't utilize but that's beneficial impacts. There's also a category called no impact. Basically we don't give it a classification. It just isn't an impact. There may be a significance criteria that says here's something that could occur and we analyze it and realize it wouldn't occur.

In general across those 9 issue areas that I showed you earlier, we identified 34 impacts that were potentially significant -- excuse me. They were significant -- they were either less than significant, potentially significant, or significant and unavoidable. It turns out we had no significant and unavoidable. We just had Class 2 and Class 3, which is significant but can be reduced to less than significant level or less than significant. So of those, the ones that are most important to our analysis are the 4 that we've determined to be potentially significant and those are impacts related to air quality, cultural resources, marine vessel traffic and noise, and all those impacts, as I said, can be reduced to a less than significant level with the mitigation measures that are recommended in the EIR/EIS, and because we have such a small number, just 4, I'm going to go through each impact briefly.

First the air quality impact will be analyzed which is basically a violation of the threshold established

by the Monterey Bay Unified Pollution Control District for construction emissions, and these are basically emissions from the cable laying vessel and the other vessels that will be used in the cable laying operation. Often for land-based emissions, the construction equipment emissions aren't considered significant from the way that the local pollution control district defines significant because they build that assumption of that type of construction vehicle operation into their planning efforts, but they haven't incorporated into the planning marine vessel construction so we have to consider that as a separate impact. This impact can be mitigated to less than significant level through the use of low emission fuels which are available for some of the support vessels and the on shore construction, primarily for the horizontal directional drilling that's proposed as part of the project, and then a program that the air pollution control district has in place, the standard mitigation that they use is to contribute to an emission reduction program, and we have several options there open from the district to determine what is the appropriate contribution to an emission control program.

The second impact is the cultural resources impact. Basically the MBARI has designed the cable route such as to avoid any known coastal resources, and by

coastal resources we're primarily talking about shipwrecks. Those are the historical resources. There's potential, however, that in some parts of the cable route, even though they have not been detected, there is potential based on the depth of the disturbance of the seabed that there could be prehistoric resources, basically cultural resource sites that were established about 18,000 years ago when the sea level was much lower and some areas out in the bay were actually dry land and able to be used by Man, so the mitigation there is to more closely review the data that's already been collected in selecting the cable route, and the feeling is that with the combination of geologists and qualified archeologists that they can then determine whether there's anything that needs more specific investigation with say an ROV to see if there's anything that might be a significant historic impact.

The next impact relates to marine vessel traffic. Basically the concern is here is vessels operating too close to one another, and particularly the cabling vessel which is a vessel with low maneuverability, and there's supposed to be a buffer of one mile around such a ship when it's operating. There's a possibility that another research project which is the hole boring project which is close to the planned location of the science node could happen at the same time. If that's true, then there's the

possibility that the 2 operations could be within a mile of one another, so the mitigation is simply to do some planning to avoid that, if the ships are operating at the same time, the boring ship and the cabling vessel, that their scheduling be such that they wouldn't be operating at the same time.

The last potentially significant impact had to do with noise generated during construction. This is a fairly common impact. As we all know, construction equipment produces both intermittent and continuous noise levels that are pretty high and it's often true that if there's a sensitive receptor nearby, it would be exposed to high noise levels, so the Monterey Bay County Noise Control Ordinance specifies that at 50 feet no construction noise is to exceed 85 decibels. We think there's a possibility that during the horizontal directional drilling activity, that could exceed that slightly, so there's some measures recommended to avoid that excedence of that level which is basically to shield their operating theatre and there's several methods available. So those are the 4 potentially significant impacts. All were reduced to a less than insignificant level.

So another thing I wanted to talk about briefly were the alternatives being evaluated. The consultant team and the lead agencies got together and looked at several

alternatives, some of which were originally proposed by the applicant and dismissed and reevaluated those as well to see if they had merit in terms of the potential to be a reasonable alternative and if they had potential to reduce or avoid impacts of the proposed project, and so of the 6 original alternatives, we determined that there were 3, including the alternative of doing nothing, the no action project, the no action alternative, that there were 3 that deserved a full evaluation in the EIR. So those are basically 2 alternative landing locations, and the basic cable route as you can see would be the same as proposed by MBARI but it would come ashore and land at sundry locations. And as it turns out, after we analyzed these, the impacts were very similar. They were the same. There were some differences but generally much more similarity to what we had determined before. And just to briefly show you what these alternative landing locations are, Alternative 1 was a variation on a concept that MBARI had previously developed for landing the cable. That was to enter the pipeline that is owned by Duke Energy to serve -- formerly serve the Moss Landing Power Plant. It's no longer utilized, but it is a pipeline. It's in good condition. It extends out from the shore, and it would be to bring that cable to that pipe and pull it to shore through that pipe. So we looked at the impacts of that and

it also involved horizontal directional drilling across the harbor entrance to Moss Landing.

The second alternative was to the south which is to bring the cable across the head of the Monterey Canyon and run it parallel to shore and bring it to the location of a planned pier that's going to be built at the end of Sandholdt Road there by Moss Landing Marine Laboratories. This pier isn't under construction yet but the idea is that when it is built, the cable could come in at that location, attach to the pier, and land using that method.

So that's a summary of the EIR/EIS, just an overview. There's a lot more information I was going to present to you in the document, but that's an overview of the alternatives and the impacts that are potentially significant.

MS. HILL: Thanks, Jon.

Well, is there anyone here who would like to make any public comments at this time? No one? Not one little comment from anyone? Okay. Are there any other questions? No? Okay. Michelle, did you have some closing remarks or did we cover them already? Any next steps?

MS. BROWN: No.

MS. HILL: Okay. We've pretty much covered them.

MS. BROWN: If we have no further questions, or no

questions at all rather or comments, then this will close the session and we will be having another public meeting at 6:30 p.m. Thank you.

(The meeting ended at 4:42.)

STATE OF CALIFORNIA)
) ss.
COUNTY OF SANTA CRUZ)

I, MELINDA NUNLEY, a Certified Shorthand Reporter, License Number 9332, and a Notary Public in and for the State of California, do hereby certify:

That the said Transcript of Proceedings was reported by me in machine shorthand at the time and place therein named and was thereafter transcribed by means of computer-aided transcription, and the same is a true, correct and complete transcript of said proceedings, to the best of my ability.

I further certify that I am not of counsel nor related to any of the parties hereto, nor in any way interested in the outcome of these proceedings.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal this 14th day of April 2005.

_____
Certified Shorthand Reporter
and Notary Public